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## EUROPEAN PATENT APPLICATION

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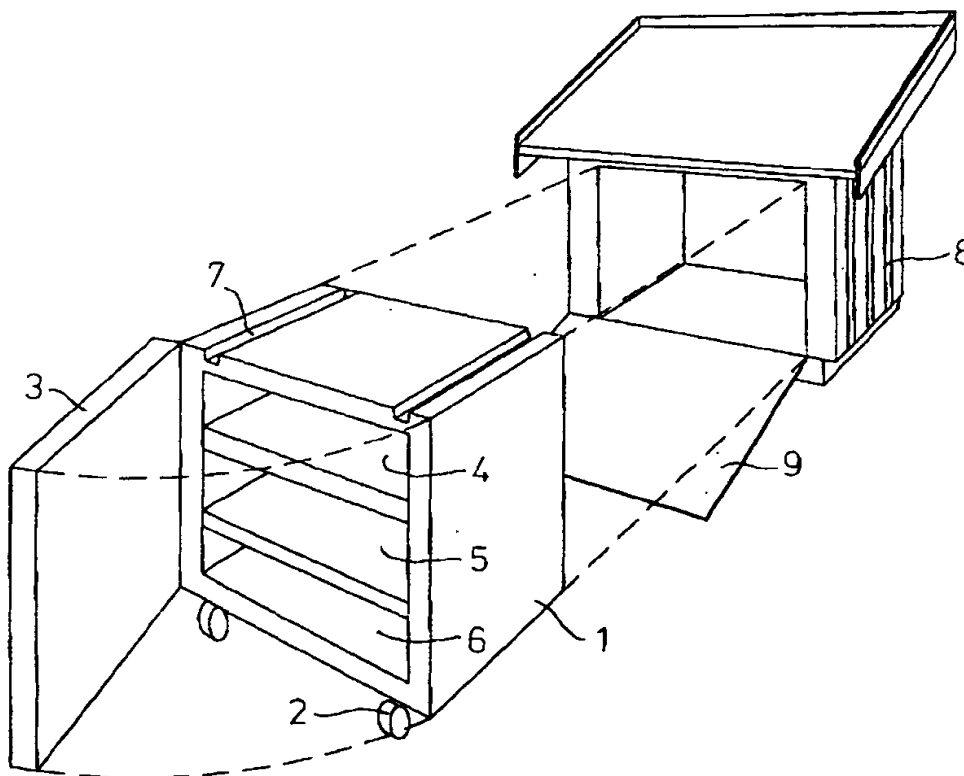
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### (54) A distribution system for remote trade

(57) A distribution unit for remote trade comprises a movable distribution unit (1) for use in transporting goods between the distributor and customer, and a stationary receiving unit (8) fixedly arranged and secured at the customer's premises, the receiving unit (8) being arranged to lockably receive the movable distribution unit (1).



## Description

[0001] The present invention relates to a distribution system for remote or electronic trade, e.g. such as trade via Internet or any other current or future forms of trade where the buyer orders the goods from the seller through an arrangement that does not require physical contact with the goods in order for the buyer to take possession of the goods.

[0002] To day trade via e.g. Internet generally requires that the buyer or his representative is present when the seller or his representative delivers the goods. This is so because at present there is no solution that guarantees that the goods are received by the customer unless they are delivered directly to him. Furthermore, the buyer may not have paid for the goods before delivery, and the seller may want to ascertain that the goods have a satisfactory quality when delivered to the buyer.

[0003] One object of the present invention is to provide a distribution system for remote trade which ensures that the goods can be delivered to the buyer without the buyer being present at the delivery address and without the seller or buyer being subjected to a higher risk than with the present delivery solutions.

[0004] This is obtained in accordance with the invention by means of a distribution system for remote trade, wherein the system comprises a movable distribution unit for use in the transportation of goods between the distributor and customer and a stationary receiving unit fixedly arranged and secured at the premises of the customer, the receiving unit being arranged to lockably receive the movable distribution unit.

[0005] The invention also relates to a movable distribution unit for use in the system defined above, wherein the distribution unit has standardised outer dimensions and a parallelepipedic form, is adapted for storage in a distribution vehicle, and contains a replaceable inner unit adaptable to the goods to be distributed.

[0006] The invention further relates to a receiving unit for use in the system and with the distribution unit defined above, the receiving unit having a lockable door.

[0007] Further advantageous features of the invention will be apparent from the dependent claims and the following description of the non-limiting exemplifying embodiment of the invention illustrated in the appended drawing.

[0008] In the Figure a container 1 is shown, the container having a parallelepipedic form and outer dimensions standardised at 90 x 90 x 55 cm. The container is provided with wheels 2 for facilitating its movement and a door 3 for closing its internal space, which in the embodiment shown has an internal arrangement dividing it into three compartments 4, 5 and 6 for dry goods, refrigerated goods and frozen goods, respectively. The container is thermally insulated and provided with its own cooling apparatus (not shown) to receive electric power from an external power supply. The top of the container 1 is provided with grooves 7 for the purpose of stabilising

the containers during transport.

[0009] The Figure further shows a stationary receiving unit in the form of a box 8 to be fixedly arranged and secured at the premises of the customer, e.g. outside the home of the buyer. The box 8 has a front opening provided with a door 9 hinged at the bottom so that it may be lowered and act as a ramp for the container 1. The door 9 is lockable, and both the buyer and seller have a key. The receiving unit 8 may be provided with a power supply for the refrigeration apparatus of the container 1.

[0010] In using the system according to the invention, the buyer orders the goods from the seller via Internet, fax or the like and indicates the latest time for delivery. He may pay for the order in any suitable way, e.g. via an account with the seller or a bank.

[0011] The seller packs the goods in the container, the internal arrangement of which is chosen to suit the type of goods ordered, e.g. various types of foodstuffs and beverages. The container must be such that the various goods maintain their quality during transportation and temporary storage at their destination until the buyer has had the occasion to take them to his personal possession.

[0012] The container is transported from the seller to the buyer by car. The transporter removes any empty container from the buyer's box 8 before placing the new container with the goods in the box and locking the door 9.

[0013] Thus, the distribution system according to the invention functions without the buyer at any time being involved in the distribution process until he opens the receiving unit 8 at his home or other premises.

[0014] It will be understood that the distribution system is not limited to consumable goods but may also be used for e.g. bulk material. Furthermore, the empty container may be used for returning empty bottles or other material for recycling.

## Claims

1. A distribution system for remote trade, characterized in that it comprises the combination of a movable distribution unit (1) for use in the transportation of goods between the distributor and the customer, and a stationary receiving unit (8) fixedly arranged and secured at the customer's premises, where the receiving unit (8) is arranged to lockably receive the movable distribution unit (1).
2. , A movable distribution unit (1) for use in a system according to claim 1, characterized in that it has standardised outer dimensions and a parallelepipedic form, is adapted for being stored in a distribution vehicle, and contains a replaceable internal arrangement which is adaptable to the goods to be distributed.

3. A distribution unit according to claim 2,  
characterized in that the internal arrangement comprises a large room for voluminous articles.
4. A distribution unit according to claim 2, 5  
characterized in that the internal arrangement comprises a plurality of smaller rooms (4,5,6) for different types of goods.
5. A distribution unit according to claim 4, 10  
characterized in that the internal arrangement comprises at least one room (5,6) for refrigerated and/or frozen goods.
6. A distribution unit according to claim 5, 15  
characterized in that said at least one room (5,6) for refrigerated and/or frozen goods is thermally isolated.
7. A distribution unit according to claim 6, 20  
characterized in that said at least one room (5,6) for refrigerated and/or frozen goods is provided with its own cooling apparatus.
8. A receiving unit (8) for use in the system according 25  
to claim 1, characterized in that has a lockable door (9).
9. A receiving unit according to claim 8, 30  
characterized in that it is provided with a power supply for the movable distribution unit (1).

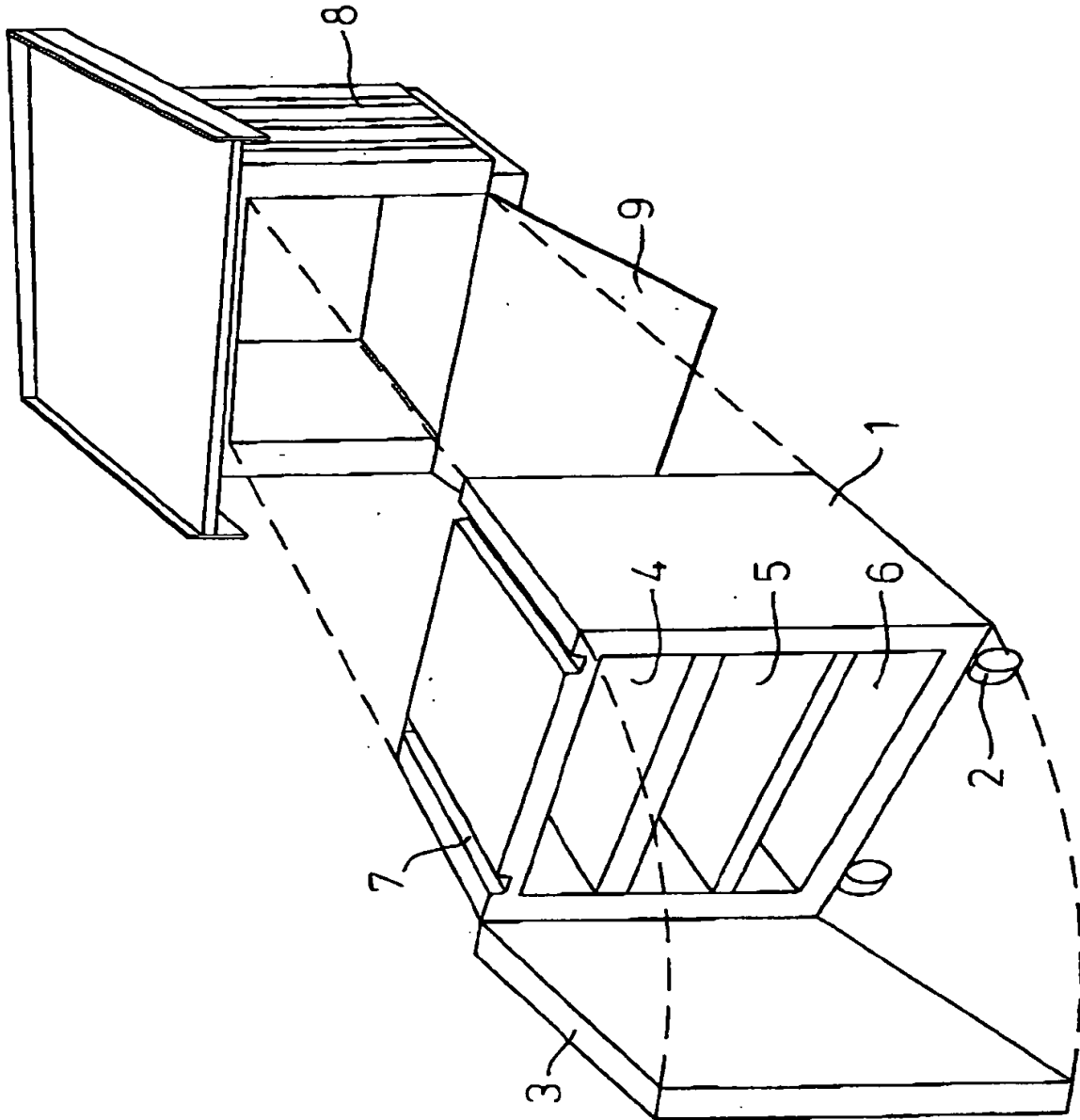
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# EUROPEAN SEARCH REPORT

Application Number  
EP 00 61 0001

| DOCUMENTS CONSIDERED TO BE RELEVANT   |   |  |  |
|---|---|--|--|
| Category  | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim  | CLASSIFICATION OF THE APPLICATION (Int. Cl. 7) |
| X   | US 3 747 752 A (READER)<br>24 July 1973 (1973-07-24)                          | 1-4, 8   | A47G29/20                                      |
| Y   | * figures 4, 6 *  | 5, 6   |  |
| X   | US 3 236 443 A (ORLANDO)<br>22 February 1966 (1966-02-22)                     | 1-3, 8   |  |
| Y   | * column 3, line 56 - line 75; figure 3 *                                     | 5, 6   |  |
| X   | DE 38 43 287 A (REHAHN)<br>28 June 1990 (1990-06-28)                          | 2-7  |  |
| X   | EP 0 072 336 B (R. FRITSCH S.A.)<br>16 April 1986 (1986-04-16)                | 1, 8, 9  |  |
| X   | US 3 732 978 A (READER)<br>15 May 1973 (1973-05-15)                           | 1, 2, 4, 8   |  |
| X   | FR 1 535 074 A (FISCHL)<br>* page 3, paragraph 2; figures 6, 7 *              | 1, 8   | TECHNICAL FIELDS<br>SEARCHED (Int. Cl. 7)      |
| A   | * figures 1, 2 *  | 3-7  | A47G<br>B07C<br>A47B<br>A47J                   |
| The present search report has been drawn up for all claims  |   |  |  |
| Place of search<br>THE HAGUE  |   | Date of completion of the search<br>16 June 2000   | Examiner<br>Beugeling, G.L.H.                  |
| CATEGORY OF CITED DOCUMENTS   |   | I : theory or principle underlying the invention<br>E : earlier patent document, but published on, or after the filing date<br>D : document cited in the application<br>L : document cited for other reasons<br>& : member of the same patent family, corresponding document |  |
| X : particularly relevant if taken alone<br>Y : particularly relevant if combined with another document of the same category<br>A : technological background<br>O : non-written disclosure<br>P : intermediate document |   |  |  |

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 00 61 0001

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on  
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16-06-2000

| Patent document<br>cited in search report |   | Publication<br>date | Patent family<br>member(s) |  | Publication<br>date |
|---|---|---------------------|----------------------------|--|---------------------|
| US 3747752                                | A | 24-07-1973          | NONE                       |  |                     |
| US 3236443                                | A | 22-02-1966          | NONE                       |  |                     |
| DE 3843287                                | A | 28-06-1990          | NONE                       |  |                     |
| EP 0072336                                | B | 16-02-1983          | FR 2510384 A               |  | 04-02-1983          |
|   |   |                     | AT 19187 T                 |  | 15-05-1986          |
|   |   |                     | DE 3270614 D               |  | 22-05-1986          |
|   |   |                     | EP 0072336 A               |  | 16-02-1983          |
| US 3732978                                | A | 15-05-1973          | CA 985239 A                |  | 09-03-1976          |
| FR 1535074                                | A |                     | NONE                       |  |                     |

EPO FORM P/169

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